



ABSTRACT

LACTAM DERIVATIVES

The invention relates to tricyclic lactams of the general formula (I)

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wherein Im represents an imidazolyl group of the formula:

$$\mathbb{R}^4$$
 or $\mathbb{R}^3\mathbb{N}$ \mathbb{R}^3

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and R¹ represents a hydrogen atom or a group selected from C₁₋₆alkyl, C₃₋₆alkenyl, C₃₋₁₀alkynyl, C₃₋₇cycloalkyl, C₃₋₇cycloalkylC₁₋₄alkyl, phenyl, phenylC₁₋₃alkyl, phenylmethoxymethyl, phenoxymethyl, phenoxymethyl, -co₂R⁵, -coR⁵, -coR⁵, -coR⁵, 6 or -so₂R⁵ (wherein R⁵ and R⁶, which may be the same or different, each represents a hydrogen atom, a C₁₋₆alkyl or C₃₋₇cycloalkyl group or a phenyl or phenylC₁₋₄alkyl group, in which the phenyl group is optionally substituted by one or more C₁₋₄alkyl, C₁₋₄alkoxy or hydroxy groups or halogen atoms, with the provise that R⁵ does not represent a hydrogen atom when R¹ represents a group -co₂R⁵ or -so₂R⁵),

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one of the groups represented by R^2 , R^3 and R^4 is a hydrogen atom or a C_{1-6} alkyl, C_{3-7} cycloalkyl, C_{3-6} alkenyl, phenyl or phenyl C_{1-3} alkyl group, and each of the other two

groups, which may be the same or different, represents a hydrogen atom or a C_{1-6} alkyl group;

n represents 2 or 3;

and physiologically acceptable salts and solvates thereof.

The compounds are potent and selective antagonists of the effect of 5-HT at 5-HT₃ receptors and are useful, for example, in the treatment of psychotic disorders, anxiety, and nausea and vomiting.

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